3.0 SOUTHWEST SKETCH PLANNING TOOL SOCIOECONOMIC DATA

The Southwest Sketch Planning Tool (SWSPT) is used to estimate interstate travel demand in the southwestern United States and portions of northern Mexico. This model provides important input on regional travel for the AZTDM. This section details the methodology and sources used to prepare 2030 and 2050 projections for the tool.

3.1 SWSPT Overview

The ADOT Project Team identified an Arizona regional travel influence area for the SWSPT. The study team considered proximity, regional connectivity, and existing and potential travel activity. In the United States, the SWSPT includes:

- Arizona
- California (southern)
- Nevada (Clark County)
- Utah (southern)
- Colorado (southwestern)
- New Mexico (eastern)

In Mexico, the SWSPT includes

- Sonora
- Baja California
- Chihuahua (northwestern)

Figure 3-1 shows the SWSPT area.

The roadway network is a high-level network that includes interstates, federal highways, and key state and county routes. Existing traffic count data on these facilities was used with a matrix estimation algorithm to develop base year 2005 vehicle trip interaction. This sketch planning technique uses year 2005 travel patterns to establish 2030 and 2050 passenger vehicle forecasts, using growth rates based on population projections. More detail on the SWSPT itself will be available in the calibration and validation report.

3.2 TAZ Geography

Traffic analysis zones (TAZs) are geographic areas in a travel demand model where trips begin and end. Typical TAZ boundaries are roadways, census tract boundaries and physical features such as rivers. TAZ boundaries within Arizona were taken from the MAG bqAZ Sketch Planning Tool. TAZs outside Arizona were established using county and census tract geography. For the Mexico region, TAZ geography was established using the model roadway network.

Figure 3-1 shows the TAZs in the model area. The SWSPT includes 609 TAZs, consisting 296 TAZs in Arizona, 294 TAZs in other states, and 19 in Mexico.